



AAN 71st ANNUAL MEETING ABSTRACT

Abstract Title: Cannabis, Concussion, and Chronic Pain: An Ongoing Retrospective Analysis at Dent Neurologic Institute in Buffalo, NY

Objective: Examine medical cannabis (MC) as treatment for concussion-related chronic pain in an established MC clinic.

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Background: Individuals with concussion often experience chronic discomfort from post-traumatic headaches. MC treatment was approved for use in chronic pain by New York State in 2017. DENT has treated 5,260 patients with MC, including 4,017 for chronic pain and 399 with concussion symptoms.

Design/Methods: A retrospective analysis of post-traumatic concussion patients with active MC treatment (N=70) and failure to initiate MC treatment (N=33) was conducted. In total, 103 charts were reviewed, with a total of 150 expected by presentation.

Results: The Patient Global Impression of Improvement (PGI-I) scale revealed 70% of patients experienced significant improvement in activity level and symptoms. Five common concussion symptoms (headache, mood, sleep, attention/concentration, and dizziness) were tracked. MC treatment provided the greatest improvement to sleep (80%), headache (77%), and mood (77%). Quality of Life (QOL) after Brain Injury Score (QOLIBRI) scores were obtained for both groups. This comparison showed a significant improvement ($p=0.0002$) in QOL of individuals on MC. Of the 21 patients on opioid pain medications, 38% of patients decreased or discontinued these medications. For the 69 patients on other concussion related medications, 13% decreased or discontinued those medications. The routes of administration that produced optimal benefit were 20:1 (THC:CBD) oral tincture at an average dose of 1.6 milliliters TID for prophylaxis and 20:1 vapor inhalation pen for acute pain. Together these products cost an average of \$221 per month. Side effects were reported in 19% of patients, all minimal, with 40% related to administration route (poor taste, cough). No patients discontinued MC due to side effects.

Conclusions: Results support MC as an option for treatment of concussion-related chronic pain. While prospective studies are required, these preliminary results lay the foundation for investigating MC as a valid treatment for concussion-related chronic pain.

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